

An aerial photograph of a large concrete dam situated in a deep, narrow canyon. The river flows through the canyon, and the surrounding slopes are covered in dense green forest. The image is slightly faded to allow the text to be read clearly.

Is There a Need to Modify Existing Water Quality Standards in Hells Canyon?

Ralph Myers
Idaho Power Company



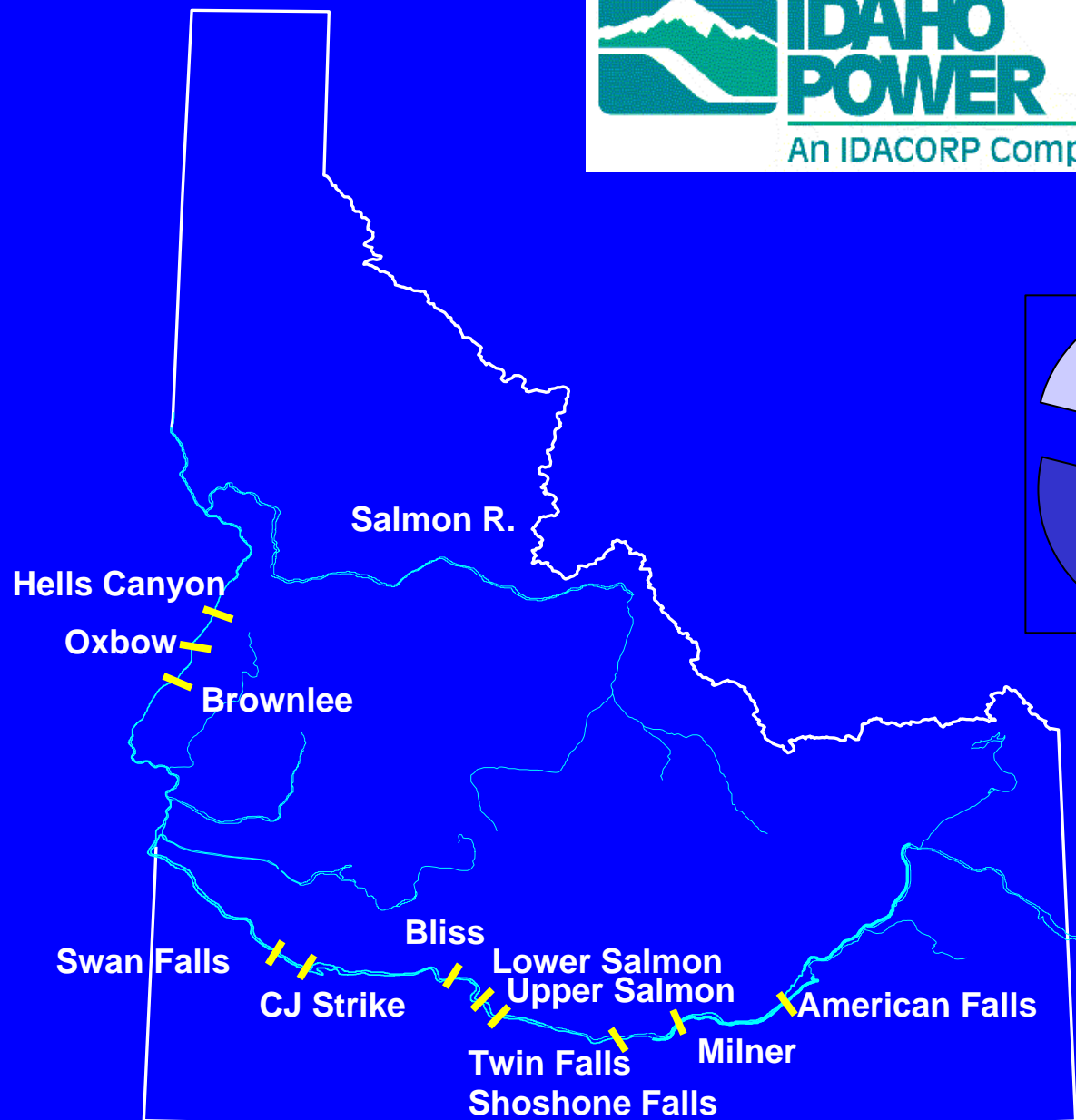
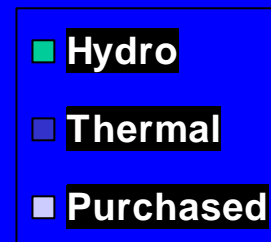
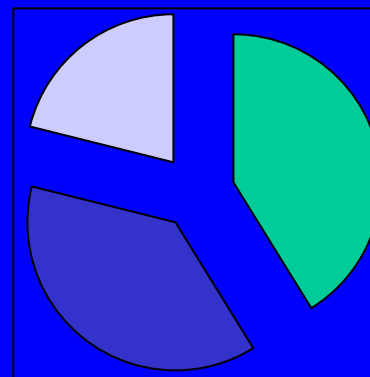
An aerial photograph of a large dam and reservoir, likely the Hoover Dam. The reservoir is a deep blue color, and the dam is a long, straight structure across the middle of the image. The surrounding landscape is arid and hilly, with some roads and small buildings visible. The image is slightly faded and has a grainy texture.

Is There a Need?

- **Does Anyone Care?**
- **Are Existing Standards Appropriate?**



Generation Sources: 2000



Fish Resources



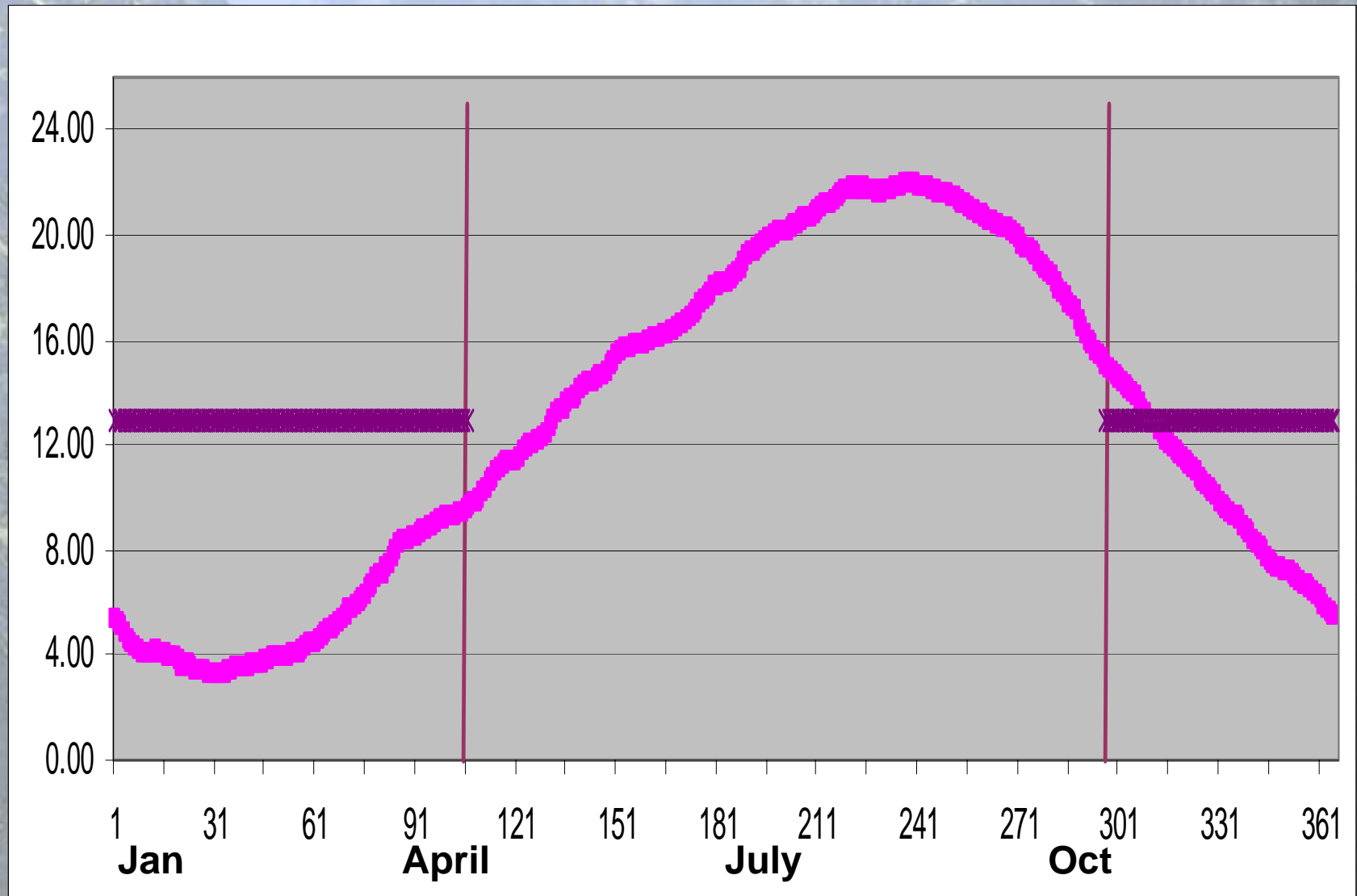


An aerial photograph of a river valley. A large concrete dam is visible in the middle ground, spanning the width of the river. The river flows from the top of the image towards the bottom. The surrounding landscape is rugged and covered in dense green forest. The sky is visible at the top, showing some clouds. The overall scene is a natural landscape with a significant human-made structure.

Is The Existing Salmonid Spawning Temperature Standard Appropriate?

- A constant standard is not appropriate
- 13°C is not the right standard

A constant standard is not appropriate



13°C is not the right standard

- Olson and Foster (1955): No better survival at 13°C than 16.1°C.
- Ongoing IPC and Battelle Northwest studies show no difference between 13°C and 15°C
- Hanford Reach of the Columbia River has similar thermal regime to Hells Canyon and supports the strongest spawning population of fall chinook in the Northwest.
- IDEQ has failed to identify any evidence that the fall chinook population below Hells Canyon Dam is impaired by the temporal thermal shift.

Is Existing Salmonid Spawning Oxygen Standard Appropriate?

- Assumes a 3.0 mg/L difference between water column and intergravel levels
- Does not account for life stage differences

An aerial photograph of a deep, rugged canyon. A winding road with yellow and black markings snakes through the lower right portion of the canyon. A river or stream flows through the bottom of the canyon. The canyon walls are steep and rocky, with some sparse vegetation. The overall tone of the image is somewhat desaturated, with a mix of greys, blues, and muted greens.

There is a Need to Modify Existing Salmonid Spawning Standards in Hells Canyon